

Patent Claims

1. Polymer blend with shape-memory characteristic comprising two different block copolymers each containing at least one hard segment and at least one soft segment, wherein the two different block copolymers comprise the same soft segment and only differ with regard to the hard segment.
2. Polymer blend according to Claim 1, wherein the hard and soft segments are selected from polyester segments and polyetherester segments.
3. Polymer blend according to Claim 1 or 2, wherein the hard and soft segments are linked together by urethane bindings.
4. Polymer blend according to one of the Claims 1 to 3, wherein the hard and soft segments are not aromatic.
5. Polymer blend according to one of the Claims 1 to 4, wherein the soft segment is selected from the group consisting of copolyepsilon caprolactone glycolide and polyalkylene adipinate.
6. Polymer blend according to one of the Claims 1 to 5, wherein the hard segment is selected from poly-p-dioxanone and polyepsilon caprolactone.
7. Polymer blend according to one of the Claims 1 to 6, wherein the two block copolymers themselves do not exhibit any shape-memory characteristics.
8. Method for producing a polymer blend according to one of the Claims 1 to 7, wherein the two block copolymers are either mixed together in solution, whereupon the blend is obtained either by evaporation of the solvent or by precipitation, or wherein the two block copolymers are mixed in the melt, preferably by using an extruder.
9. Block copolymer, comprising at least one hard segment and at least one soft segment, wherein the hard segment is selected from poly-p-dioxanone and polyepsilon caprolactone and wherein the soft segment is selected from copolyepsilon caprolactone glycolide and polyalkylene adipinate.
10. Method for producing a block copolymer according to Claim 9, comprising the provision of precursor substances for the hard segment, respectively for the soft segment, preferably in the form of diols, and reaction of the precursor substances with the formation of a polymer, preferably with the use of a diisocyanate for linking of the individual segments by urethane bindings.
11. Use of two different copolymers according to Claim 9 for the production of polymer blends according

to one of the Claims 1 to 7.

12. Polymer blend with shape-memory characteristic, comprising two different block copolymers, each containing at least one hard segment and at least one soft segment, wherein the segments of the respective block copolymers are linked together by urethane segments.